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I and Q variable gain amplifiers to generate I and Q signals, respectively; a detector to generate a detect signal by detecting a difference between the I and Q signals; an ADC to convert the detect signal to a digital detect signal; and an engine to generate a control signal responsive to the digital detect signal and a reference signal; where the I and Q VGAs operate responsive to the control signal.

21. (New) The wireless receiver of claim 20 comprising:

I and Q buffers to buffer the I and Q signals, respectively.

22. (New) The wireless receiver of claim 20 where the detector includes:

I and Q high pass filters to generate I and Q filtered signals by removing direct current offsets from the I and Q output signals.

23. (New) The wireless receiver of claim 22 where the detector includes:

a rectifier communicating with the I and Q high pass filters to change the I and Q filtered signals from alternating current to direct current.

24. (New) The wireless receiver of claim 23 where the detector includes:

an operational amplifier to generate added I and Q signals by adding the I and Q filtered signals.

25. (New) The wireless receiver of claim 24 where the detector includes:

a low pass filter to filter the added I and Q signals.

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25. (New) A method comprising;

generating a detect signal by detecting a difference between I and Q signals at respective outputs of I and Q variable gain amplifiers of a plurality of serially connected automatic gain control stages;

converting the detect signal to a digital detect signal;

generating a control signal to control the I and Q variable gain amplifiers responsive to the digital detect signal; and

adjusting the I and Q variable gain amplifiers responsive to the control signal.

27.

26. (New) The method of claim 25 comprising:

generating I and Q filtered signals by removing direct current offsets from the I and Q output signals.

28.

27. (New) The method of claim 26 comprising:

rectifying the I and Q filtered signals from alternating current to direct current.

29.

28. (New) The method of claim 27 comprising:

adding the rectified I and Q signals.

30.

29. (New) The method of claim 28 comprising:

low pass filtering the added I and Q signals.